

**#4386** Store at -20°C

## MTSS1 (N747) Antibody


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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M R Mk	Endogenous	95-105	Rabbit	#O43312	9788

<b>Product Usage Information</b>	<b>Application</b> Western Blotting	<b>Dilution</b> 1:1000
<b>Storage</b>	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.	
<b>Specificity / Sensitivity</b>	MTSS1 (N747) Antibody detects endogenous levels of total MTSS1 protein.	
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino acids surrounding Asn747 of human MTSS1. Antibodies are purified by peptide affinity chromatography.	
<b>Background</b>	Metastasis suppressor 1 (MTSS1) is a multi-functional scaffold protein that was initially discovered using a differential display technique that identified proteins missing from bladder cancer cell lines (1,2). MTSS1 (also known as Missing in Metastasis or MIM) is a cytoskeletal remodeling protein that contains a C-terminal WH2 actin-binding motif (1,3). Presence of an IMD (IRSp53/MIM homology) domain allows MTSS1 to induce F-actin bundling and filopodia formation in cells (4). MTSS1 binds to and activates Rac, a protein known to promote the formation of filopodia and lamellipodia (5). The receptor tyrosine phosphatase δ (PTPRD) is associated with MTSS1 and is required for MTSS1-dependent cytoskeletal change (6,7). MTSS1 is a SHH responsive gene that can help regulate GLI-dependent transcriptional activity (8).	
<b>Background References</b>	1. Lee, Y.G. et al. <i>Neoplasia</i> 4, 291-4. 2. Machesky, L.M. and Johnston, S.A. (2007) <i>J Mol Med</i> 85, 569-76. 3. Mattila, P.K. et al. (2003) <i>J Biol Chem</i> 278, 8452-9. 4. Yamagishi, A. et al. (2004) <i>J Biol Chem</i> 279, 14929-36. 5. Bompard, G. et al. (2005) <i>J Cell Sci</i> 118, 5393-403. 6. Woodings, J.A. et al. (2003) <i>Biochem J</i> 371, 463-71. 7. Gonzalez-Quevedo, R. et al. (2005) <i>J Cell Biol</i> 168, 453-63. 8. Callahan, C.A. et al. (2004) <i>Genes Dev</i> 18, 2724-9.	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
<b>Applications Key</b>	<b>WB:</b> Western Blotting
<b>Cross-Reactivity Key</b>	<b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected
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